

WE CLAIM:

1. A method for dynamically providing information to a user via a visual display
2 associated with a user computer, the method comprising the following steps:
3 assigning the user a user identification code;
4 assigning an application code to at least a first website and a second website to be
5 viewed by said user;
6 recording the user's activity associated with said first and second websites by
7 monitoring said user identification code and said application code;
8 determining the user's viewing preference associated with said first website based
9 on the user's activity associated with said first website;
10 determining the user's viewing preference associated with said second website
11 based on the user's activity associated with said second website; and
12 dynamically adjusting the user's display in accordance with the user's preference
13 associated with the website being viewed by the user.

1. The method of claim 1, further comprising the step of downloading from a system
2 server a display application for each website where the user's activity is to be recorded.

1 3. The method of claim 2, further comprising the step of utilizing a message broker
2 to handle communications between said server and said display application.

1 4. The method of claim 2, further comprising the step of utilizing a message broker
2 to handle communications between said server and other applications associated with said user
3 computer.

1 5. The method of claim 1, wherein the recording step comprises the further step of
2 recording a URL associated with the website being viewed by said user.

1 6. The method of claim 1, wherein said visual display includes a browser function
2 and said adjusting step adjusts the browser.

1 7. The method of claim 1, further comprising the step of generating a user
2 information record associated with each user, the user information record including the user
3 identification code, an IP address field indicating the last internet address from which the user
4 communicated, a country code field indicating the country from which the user last
5 communicated, and a last login field indicating the last time that the user communicated.

1 8. The method of claim 7, further comprising the step of customizing information
2 presented to a user in accordance with the country code field associated with the user.

1 9. The method of claim 1, further comprising the step of generating a user session
2 record associated with a communication session with the user, the user session record including
3 the user identification code or a similar unique identifier associated with the user, the application
4 code associated with a website, an IP address field indicating the last internet address from which
5 the user communicated, session timing information, and a unique session identification code.

1 10. The method of claim 9, wherein said session timing information includes a
2 session start time and a session end time.

1 11. The method of claim 10, further comprising the step of generating user-specific
2 statistics including user session duration and peak time of use.

1 12. The method of claim 10, further comprising the step of generating average user
2 session duration, average client session duration, user session peak time of use and client session
3 peak time of use for a plurality of users.

1 13. The method of claim 1, further comprising the step of generating a session
2 identifier for tracking application activities, the session identifier including the application code
3 associated with the website and an application name field indicating the textual name associated
4 with the website.

1 14. The method of claim 13, further comprising the step of transmitting messages to
2 be displayed the user, and wherein the session identifier further includes an application message
3 interval field indicating a period of time between messages sent from a message queue to the
4 application, a welcome wait interval which indicates an amount of time to wait before requesting
5 a next display message from the message queue, and a query time interval which indicates a
6 period of time between application queries for additional information.

1 15. The method of claim 1, further comprising the step of generating an application
2 navigation record indicating the primary location the process initially accesses when the process
3 is first executed, the application navigation record including the application code, a navigation
4 URL field indicating a web address to be initially accessed upon initial execution, a country code
5 field indicating the user's country for which the URL navigation field is applicable.

1 16. The method of claim 1, further comprising the step of generating an application
2 customization record which includes application parameters related to user behavior, the

3 application customization record including the application code, a user behavior type indicator,
4 and a tag name field and value name field which provide a textual information tag and an
5 associated value, respectively, for the application.

1 17. The method of claim 16, further comprising the step of customizing the user's
2 display in accordance with the user behavior type.

1 18. The method of claim 1, further comprising the step of generating a user behavior
2 information record indicating weighted information about the user's behavior, the user behavior
3 information record including the user identification code or a similar unique identifier associated
4 with the user, a behavior type field indicating information about the user's type of interests, and a
5 weight field indicating the appropriate weighting or significance of each user behavior type.

1 19. The method of claim 18, further comprising the step of generating a plurality of
2 user behavior information records, and utilizing the plurality of user behavior information records
3 to perform additional customization of the user's display.

1 20. The method of claim 1 further comprising the step of generating a user URL
2 information record which indicates user URL tracking information used to generate user behavior
3 information, the user URL information record including the user identification code or a similar

4 unique identifier associated with the user, a session identifier which identifies the session of the
5 user for a particular URL, a domain field and page field associated with the particular URL, a
6 page type field which identifies the type of URL, and a duration field which indicates an amount
7 of time the user spent at a particular URL.

1 21. The method of claim 20, further comprising the step of utilizing user URL
2 information records to generate user behavior statistics, including at least one of total and
3 average number of times the user visited a particular URL, the total and average time the user
4 spent at a particular URL, the peak time when the user visited a particular URL, and the types of
5 pages viewed by the user.

1 22. The method of claim 20, further comprising the step of utilizing user URL
2 information records to generate URL statistics, including at least one of total and average number
3 of times that users visited a particular URL, the total and average time users spent at a particular
4 URL, and the peak time when users visited a particular URL.

1 23. The method of claim 20, further comprising the step of utilizing user URL
2 information records to customize the user's display.

1 24. The method of claim 1, further comprising the step of generating a user
2 application information record indicating information associated with client applications the user
3 has downloaded, the user application information record including the user identification code or
4 a similar unique identifier associated with the user, the application code for each particular
5 application downloaded by the user, an application version field identifying the current version of
6 each particular application, a download date field indicating the date the user downloaded the
7 particular application.

1 25. The method of claim 24, wherein the user application information record further
2 includes a last login field indicating the last time the user used the particular application, and a
3 last message identification field indicating the last message displayed to the user in connection
4 with the particular application.

1 26. The method of claim 24, further comprising the step of updating a particular
2 application in accordance with at least one of the application version field and the download date
3 field.

1 27. The method of claim 25, further comprising the step of displaying a next message
2 to the user in accordance with at least one of the last login field and the last message
3 identification field.

1 28. The method of claim 1, further comprising the step of generating an application
2 tracking record which contains information regarding application use, the application tracking
3 record including the user identification code or a similar unique identifier associated with the
4 user, a date field representing the date of a particular record, an event code field indicating a
5 particular type of event for each application, and a count field indicating the number of times a
6 particular event has occurred for a particular application.

1 29. The method of claim 28, further comprising the step of incrementing the count
2 field for each occurrence of a particular event in connection with each execution of a client
3 application.

1 30. The method of claim 1, further comprising the step of generating a message queue
2 record indicating a list of messages to be displayed to the user, the message queue record
3 including the user identification code or a similar unique identifier associated with the user, a
4 behavior type field indicating a user behavior for which messages in the queue will be
5 transmitted to the user, a message number field indicating a sequential number assigned to each
6 message, a messages field which indicates the list of messages to be transmitted to the user, and a
7 URL field indicating a web address to be transmitted to the user.

1 31. The method of claim 30, wherein the message queue record further includes a
2 mode indication indicating whether the message will be displayed as a popup window or whether
3 the application associated with the message will be pulsed when the message is transmitted to the
4 user.

1 32. The method of claim 30, further comprising the following steps:
2 requesting a message to be displayed to the user in accordance with a welcome
3 wait interval which indicates an amount of time to wait before requesting a next display message
4 from the message queue; and
5 selecting a message to be displayed to the user in accordance with the
6 identification of the user and the user's behavior type.

1 33. The method of claim 32, further comprising the step of transmitting the selected
2 message to the user in accordance with an application message interval and displaying the
3 selected message in accordance with the user's display preferences.

1 34. The method of claim 1, further comprising the step of generating an activity log
2 file which records user activities, the activity log file including a time field indicating when the
3 activity log file was created, the user identification code or a similar unique identifier associated

4 with the user, a user IP field indicating the user's last internet connection address, and an activity
5 field indicating a description for a particular user activity.

1 35. The method of claim 1, further comprising the step of utilizing an external
2 interface to interface with other systems and processes.

1 36. The method of claim 1, further comprising the step of installing said application
2 as a shortcut on the user's desktop.

1 37. The method of claim 1, further comprising the step of installing said application
2 in the user's program files menu.

1 38. The method of claim 1, further comprising the step of installing said application
2 in the user's start menu.

1 39. The method of claim 1, further comprising the step of installing said application
2 as a tray icon.

1 40. The method of claim 1, further comprising the step of optimizing the display of
2 website information by dynamically configuring the client application in order to present website
3 information in accordance with the user's history and preferences.

1 41. The method of claim 1, further comprising the step of tracking user activity in
2 connection with locations that are specified in URL format but which are not URL locations.

1 42. The method of claim 41, wherein said locations that are specified in URL format
2 include one of networked files and networked resources.

1 43. The method of claim 1, further comprising the step of calculating user behavior
2 for a plurality of users.

1 44. The method of claim 1, further comprising the step of calculating user behavior
2 for an individual user in real-time.

1 45. The method of claim 1, further comprising the steps of performing at least one
2 data count based on the user's prior usage history, and weighting the at least one data count to
3 adjust the relevance of the at least one data count to produce a running total score for at least one
4 website viewed by the user.

1 46. The method of claim 45, further comprising the step of adjusting the running total
2 score in accordance with an amount of time the user spent at at least one website included in the
3 count.

1 47. The method of claim 45, further comprising the step of determining the user's
2 behavior by selecting the website with the highest running total score.

1 48. The method of claim 45, further comprising the step of determining the user's
2 behavior by selecting the website with the second highest running total score in the event that the
3 user does not have a client application corresponding to the website with the highest running
4 total score.

1 49. The method of claim 1, further comprising the step of associating a single client
2 application or website with a plurality of users.

1 50. The method of claim 1, further comprising the step of associating a single user
2 with a plurality of client applications or websites.

1 51. The method of claim 1, further comprising the step of utilizing a plurality of
2 different varieties of client applications for a single website and a single user.

1 52. The method of claim 51, wherein said plurality of different client applications
2 includes client applications with increased functionality and client applications with increased
3 speed.

1 53. The method of claim 1, further comprising the step of transmitting customized
2 messages to a user in accordance with the user's usage.

1 54. The method of claim 53, wherein the customized messages include at least one of
2 promotional information, advertisements, and news.

1 55. A method for dynamically providing information to a user via a visual display
2 associated with a user computer, the method comprising the following steps:

3 (a) at the user computer, requesting from a remote server configuration
4 information associated with a website being viewed by said user;
5 (b) reconfiguring the visual display in accordance with the configuration
6 information;

- (c) transmitting usage information associated with the website being viewed by the user to the remote server; and
- (d) repeating steps (a), (b), and (c) for each website being viewed by the user.

56. A computer readable medium encoded with processing instructions for performing a method for dynamically providing information to a user via a visual display associated with a user computer, the method comprising:

- assigning the user a user identification code;
- assigning an application code to at least a first website and a second website to be viewed by said user;
- recording the user's activity associated with said first and second websites by monitoring said user identification code and said application code;
- determining the user's viewing preference associated with said first website based on the user's activity associated with said first website;
- determining the user's viewing preference associated with said second website based on the user's activity associated with said second website; and
- dynamically adjusting the user's display in accordance with the user's preference associated with the website being viewed by the user.

1 57. A computer readable medium encoded with processing instructions for
2 performing a method for dynamically providing information to a user via a visual display
3 associated with a user computer, the method comprising:

4 (a) at the user computer, requesting from a remote server configuration
5 information associated with a website being viewed by said user;
6 (b) reconfiguring the visual display in accordance with the configuration
7 information;
8 (c) transmitting usage information associated with the website being viewed
9 by the user to the remote server; and
10 (d) repeating steps (a), (b), and (c) for each website being viewed by the user.

1 58. An apparatus for dynamically providing information to a user via a visual display
2 associated with a user computer, comprising:

3 a processor; and
4 a memory storing processing instructions for controlling the processor, the
5 processor operative with the processing instructions to:
6 assign the user a user identification code;
7 assign an application code to at least a first website and a second website
8 to be viewed by said user;

9 record the user's activity associated with said first and second websites by
10 monitoring said user identification code and said application code;
11 determine the user's viewing preference associated with said first website
12 based on the user's activity associated with said first website;
13 determine the user's viewing preference associated with said second
14 website based on the user's activity associated with said second website; and
15 dynamically adjust the user's display in accordance with the user's
16 preference associated with the website being viewed by the user.

1 59. An apparatus for dynamically providing information to a user via a visual display
2 associated with a user computer, comprising:
3 a processor; and
4 a memory storing processing instructions for controlling the processor, the
5 processor operative with the processing instructions to:
6 (a) at the user computer, request from a remote server configuration
7 information associated with a website being viewed by said user;
8 (b) reconfigure the visual display in accordance with the configuration
9 information;
10 (c) transmit usage information associated with the website being
11 viewed by the user to the remote server; and

12 (d) repeat steps (a), (b), and (c) for each website being viewed by the
13 user.